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REMARKS

The Office Action of January 7, 2005 has been carefully considered.

Claims 12-19 have been rejected under 35 USC 101 on the basis that the claimed invention "does not produce a useful, tangible, concrete result in the technological arts. The claimed invention... merely manipulated abstract ideas without producing a physical transformation or conversion of the subject matter expressed in the claim so as to produce a change of character or condition in some physical object... The steps of the claimed method are effectively no more than ideas and concepts that are deemed abstract in nature."

Claims 12-19 have now been canceled and replaced by new claims 20-25. New claim 20 recites a method for adjusting nutrition in a person subjected to physical stress, by determining performance capacity of the person by measuring individual anaerobic threshold of the person, determining a stress state of the person in relation to the measured individual anaerobic threshold, and regulating at least one of fat, protein and carbohydrate consumption of the person as a function of the determined stress state.

Applicant submits that the invention as claimed does not merely relate to "ideas and concepts deemed abstract in nature."

Applicant has reviewed the case law cited in the Office Action, *In re Warmerdam*, 31 USPQ2d 1754 (Fed. Cir. 1994) and *In re Schrader*, 30 USPQ2d 1455 (Fed. Cir. 1994). Both of these cases apply a two step protocol dubbed the *Freeman-Walter-Abele* test. According to that test, it was first necessary to determine if the claim recited a mathematical algorithm, and if so, whether the claimed invention as a whole is directed to a mathematical algorithm that is not applied to or limited by

physical elements or process steps. In such a case, the claim is non-statutory. If the algorithm is applied to one or more elements of an otherwise statutory process claim, the requirements of 35 USC 101 are met.

In *Warmerdam*, the Federal Circuit held that the preferred, and only practical embodiment of the claimed method was an algorithm, not a physical method.

In *Schrader*, the Federal Circuit held that the only physical step was entering data into a record, which the court considered to be indistinguishable from data gathering.

The Federal Circuit effectively eliminated the *Freeman-Walter-Abele* test for patentable subject matter in *State Street Bank & Trust v. Signature Financial Group*, 47 USPQ2d 1596, holding that transformation of data can produce a "useful, concrete and tangible result."

However, Applicant does not see the need to argue *State Street*, as the claimed invention does now, and did previously, recite a actual, physical steps, not merely application of an algorithm. The steps of the invention may be summarized as follows:

1) collect data using physical testing;

2) analyze data collected (stress in relation to IAT); and

3) act on the analysis by regulating nutrition.

Thus, the first step of the claimed invention is *determining performance capacity of the person by measuring individual anaerobic threshold of the person*. This is necessarily a physical step, as it requires having a person engage in physical exercise, and measuring a parameter such as heart rate, blood pressure or, preferably, lactate concentration in the blood to determine a point at which a physiological change occurs, the individual's anabolic

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threshold.

Moreover, the third step involves the regulation of at least one of fat, protein and carbohydrate consumption, also necessarily a physical step.

Thus, to the extent that an algorithm or mental step is involved in the invention, this is an analysis step, the result of which is used to determine another physical step, and the claims are therefore patentable, even under the stricter standard of the *Freeman-Walter-Abele* test which is no longer applied.

Accordingly, the claimed invention does not merely manipulate abstract ideas, but requires physical steps to be carried out, and analysis of the data obtained in the physical steps, and application of the analysis to further physical steps. The invention is therefore fully in compliance with 35 USC 101, and withdrawal of the rejection of record is requested.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,

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